

Subject Index—Volumes 138–145

A

Abstracts

American Fracture Association tour of Norway, Finland, Sweden and Denmark, 142:267
transactions of thirty-first annual meeting of Association of Bone and Joint Surgeons, 143:278
transactions of thirty-ninth annual meeting of American Fracture Association, 144:339

Acetabulum

idiopathic protrusion acetabuli, 138:228
radiographic landmarks of, 141:166
Achilles tendon, rerupture after nonsurgical treatment, 140:175

Achondroplasia

cartilage ultrastructure in, 143:251
leg lengthening in, 144:194

Acid phosphatase

activity in subchondral bone from osteoarthritis hips, 140:85
localization in giant cell tumor of bone, 141:295

Acinetobacter calcoaceticus, hand infection from, 140:184

Acrylic cement

barium sulfate affecting polymerization temperature of Surgical Simplex P, 145:287
in cervical spine fixation, 139:276

gentamicin affecting shear and interface strengths of, 141:96

implantation after femoral reaming, 141:74
in internal fixation of trochanteric femoral fractures, in geriatric patients, 138:41

and loosening of femoral stems in hip replacement, 141:17, 66

and methylmethacrylate metabolism in man, 141:90
silver salt additives in, 143:266

Adolescence. *See* Pediatric orthopedics

Adrenal adenoma, and leg length discrepancy, 144:210

Adrenal steroids. *See* Corticosteroids

Agenesis, sacral, 139:52

anomalies with, 145:168

Alcohol syndrome, fetal, orthopedic aspects of, 139:58

Alcoholism, and osteonecrosis of femoral head, 143:222

Alkaline phosphatase, activity in subchondral bone from osteoarthritic hips, 140:85

Allescheria boydii, osteomyelitis from (*Letters*), 138:311

Amputation

above-knee
and preservation of functional stump after hip disarticulation, 141:217

and rehabilitation with rigid dressings, 143:133
and healing in dysvascular foot lesions, 142:110

Anaerobic organisms, and osteomyelitis in childhood, 145:230

Androgens, role in osteoporosis, 144:286

Ankle

arthrodesis of
follow-up study of, 142:146
in hemophilia, 138:206
in bicycle spoke fracture, 144:230
congenital vertical talus, 139:128
fractures of, evaluation of, 138:17, 111
ligamentous injury affecting, 140:266
normal talar tilt angle, 140:37
osteochondritis dissecans of talus, 144:264
prosthesis for, 142:141

Antibiotics

gentamicin affecting shear and interface strengths of bone cement, 141:96

oxacillin in foot ulcers, and clostridial myonecrosis development, 138:250

in subacute sepsis of hip, 141:143

Anticoagulants, prophylactic, in hip replacement arthroplasty, 141:134

Anticonvulsants, osteomalacia from, 139:216

Antlers of deer, bioelectric potentials in, 142:237

- Arizona hinshawii*, osteomyelitis from, 139:110
 Arterial conditions. *See* Vasculation
 Arthritis. *See also* Bowel disease with arthritis; Osteoarthritis; Rheumatoid arthritis; Septic arthritis and bilateral total knee replacement under one anesthetic, 140:153
 hemophilic, chronic, 138:203
 juvenile chronic, 143:8
 Arthrodesis
 of ankle joint
 follow-up study of, 142:146
 in hemophilia, 138:206
 compression, of finger joints, 145:183
 of first metatarsophalangeal joint, 142:48
 of knee, in hemophilia, 138:206
 of shoulder, posterior approach in, 139:169
 of wrist, 142:164
 Arthrography, septic arthritis after, 145:237
 Arthroplasty. *See* Prostheses
 Arthroscopy of knee,
 in patellofemoral joint disorders, 144:45
 Aspiration treatment
 computerized tomography with, 139:146
 in septic arthritis of hip, in children, 139:81
 Asymmetry, of lower extremities, 144:198
 Atlas. *See* Cervical spine
 Austin-Moore prosthesis, for functional above-knee stump after hip disarticulation, 141:217
 Autoimmunity, in degenerative disk disease, 142:215
 Avulsion fracture, of tibial attachment of posterior cruciate ligament, 143:107
 Axis. *See* Cervical spine
- B**
- Bacillus cereus*, and septic arthritis after arthrography, 145:237
 Back pain, low
 and hysterical personality, 140:42; 145:158
 and lumbar disk herniation
 lateral, extreme, 138:222
 simulation by tumors of pelvic girdle, 138:217
 Bacteroidaceae, and osteomyelitis in childhood, 145:230
 Barium sulfate, and polymerization temperature of Surgical Simplex P, 145:287
 Behcet's syndrome, 143:8
 Bicycle spoke fracture, 144:230
 Bioassay of joint fluids, in rheumatoid arthritis, compared to clinical status, 144:299
 Bioelectric potentials. *See* Electric current
 Biomechanics, of patella, 144:9, 51, 70
 Biopsy, computerized tomography with, 139:146
 Blood flow, in bone, rates in various regions, 138:263
 Blood vessels. *See* Vasculation
 Bone
 barrier to material transfer at bone-cartilage interface, 145:273
 constant direct current affecting osseous defect, 142:19
 control of induction in soft tissues, 143:245
 electrically stimulated osteogenesis, 141:266
 formation after pelvic injury, 140:80
 fractures of. *See* Fractures
 grafting of. *See* Grafts
 hormones affecting tissue in culture, 142:196
 inductive capacity of transplant materials, 140:208
 lining cells
 calcitonin affecting, 139:250
 parathyroid hormone affecting, 138:254
 manipulation of cell populations in treatment of osteoporosis, 143:227
 matrix morphogenetic activity affected by pulverization, 141:281
 metastases of renal cancer, regression of, 138:246
 mineral content after tibia shaft fractures, 144:266
 regional blood flow rates in, 138:263
 scans of. *See* Radionuclide imaging
 subchondral cyst of, 144:212
 tetracycline labeling of, 140:240
 tumors of. *See* Tumors
 turnover in basic multicellular units, 143:227
 vitamin D action on, 139:211
 Bowel disease with arthritis, 143:8
 in childhood, 143:80
 clinical spectrum of, 143:67
 epidemiology of, 143:23
 radiology of, 143:43
 Braces
 in Legg-Calvé-Perthes disease, and early mobilization, 139:70
 quadrilateral cast brace, in ipsilateral fracture of femur and tibia, 142:115
 Buck's traction, in fractures of thigh, 140:2
 Bunions, and arthrodesis of first metatarsophalangeal joint, 142:48
 Burns' test, in low back pain, 140:42
 Bursal osteochondromatosis, 144:269
- C**
- Caffey's syndrome, 144:276
 Calcitonin
 effects on bone lining cells, 139:250
 effects on skeletal tissue in culture, 142:196
 and fracture healing, 141:303
 role in osteoporosis, 144:287
 Calcium
 dietary requirements for, and calcium therapy, 140:216
 plasma levels of
 maintenance by bone lining cells, 138:254
 vitamin D role in, 139:206

- Carcinoma. *See* Tumors
Carpal conditions. *See* Wrist
Cartilage
barrier to material transfer at bone-cartilage interface, 145:273
cell differentiation in, 139:185
collagenous architecture of, 139:267
in dorsal defect of patella, 143:131
healing affected by collagen sponge implants, 144:326
in knee joint instability, 140:262
synovial chondromatosis. *See* Osteochondromatosis
ultrastructure in connective tissue disorders, 143:251
- Casts or braces
in Legg-Calvé-Perthes disease, and early mobilization, 139:70
pins-in-plaster for femoral fractures, negative experiences with, 138:243
quadrilateral, in ipsilateral fracture of femur and tibia, 142:115
- Caudal regression syndrome, 145:168
- Cells
bone lining cells
calcitonin affecting, 139:250
parathyroid hormone affecting, 138:254
cartilage cell differentiation, 139:185
fibroblasts in tissue culture, synovial fluid affecting, 138:279
manipulation of populations in treatment of osteoporosis, 143:227
metabolic properties of osteogenic sarcoma cells, 140:247
origin of osteoclasts, 145:252
- Cement. *See* Acrylic cement
- Cerebral palsy
coxa vara with, 144:336
muscle shortening and hip derangement in, 144:186
and pathology of spastic muscle, 142:223
- Cervical spine
atlanto-axial subluxation in Down's syndrome, 140:66
axial traction affecting, 140:47
cement fixation in, 139:276
effects of axial loading on healthy adolescent spines, 139:17
ossification of posterior longitudinal ligament, 140:58
osteomyelitis in heroin users, 144:241
- Charnley arthroplasty of hip
long-term follow-up of, 141:28
and loosening of stem prosthesis, 141:66
and lysis of femoral neck, 145:208
- Chevron osteotomy, in hallux valgus, 142:44
- Childhood conditions. *See* Pediatric orthopedics
- Chondrectomy, partial, and subchondral bone drilling in chondromalacia patellae, 144:114
- Chondrocytes, precursor cells to, 139:185
- Chondromalacia patellae, 144:22
arthroscopic diagnosis of, 144:46
classification system for, 144:55
operative management of, 144:37
partial chondrectomy and subchondral bone drilling in, 144:114
proximal realignment in, 144:63
rational approach to treatment of, 144:107
spongialization in, 144:74
- Clavicle. *See also* Sternoclavicular joint
congenital pseudarthrosis of, surgery in, 139:64
non-union of, treatment of, 138:141
compression plate in, 138:154
osteoid osteoma of, 143:162
- Clavus, interdigital, predisposition for, 142:103
- Clostridia
and myonecrosis after oxacillin in foot ulcers, 138:250
and osteomyelitis in childhood, 145:230
septic arthritis from, 139:92
- Coagulolysis assay, in detection of deep vein thrombosis, 142:190
- Coccidioidomycosis, of spine, 140:78
- Colchicine, in damaged disk syndrome, 143:183
- Colitic arthritis. *See* Bowel disease with arthritis
- Collagen
in articular cartilage, 139:267
sponge implants of, and healing of osteochondral defects, 144:326
type transition *in vivo*, 139:188
- Compartment syndrome, of interosseous muscles of hand, 140:23
- Compression
of peroneal nerve, by ganglion in peroneus longus muscle, 140:172
of spinal cord, in Paget's disease with osteosarcoma, 141:260
- Compression arthrodesis, of finger joints, 145:193
- Compression osteotomy, of tibia, 140:103
- Compression plates. *See* Plate fixation
- Compression screw
in intertrochanteric fractures of hip, 141:184
orientation across oblique fractures, 143:271
- Compression syndrome
patellar, Z-plasty lateral retinacular release in, 144:110
from ski boots, 140:109
- Congenital deformities. *See* Pediatric orthopedics
- Connective tissue disorders, cartilage ultrastructure in, 143:251
- Contracture
extension, of knees in meningomyelocele, 144:260
of thumb, adduction, with bipartite trapezium, 145:199
- Corns, soft, predisposition for, 142:103
- Cortical hyperostosis, infantile, 144:276
- Corticosteroids

- injections of, and *Mycobacterium abscessus* infection of knee, 140:162
 in prophylaxis of fat embolism syndrome, 143:211
 role in osteoporosis, 144:288
- Coxa vara, with cerebral palsy (*Letters*), 144:336
- Crescent sign, in osteonecrosis of femoral head, pathogenesis of, 140:273
- Crohn's disease, arthritis with. *See* Bowel disease with arthritis
- Cruciate ligament
 anterior
 epiphyseal osteochondroma of, 139:86
 repair of, 143:97
- posterior, avulsion fracture of tibial attachment of, 143:107
- stents in knee reconstruction, 143:90
- Cyst
 formation in hemophilia, 138:213
 popliteal, 144:215
 in shoulder, vascular compromise in, 143:151
 subchondral, of bone, 144:212
- Cytomegalic inclusion disease, fractures in, 144:280
- D**
- Darrach procedure, in rheumatoid arthritis (*Letters*), 138:310, 311
- Deer antlers, bioelectric potentials in, 142:237
- De Quervain's disease, 143:165
- Deyerle fixation, in femoral neck fractures, 144:178
- Diabetes, foot lesions in, 142:110
- Diet. *See* Nutrition
- Dilantin, osteomalacia from, 139:216
- Disk conditions
 autoimmunity in degenerative disease, 142:215
 banded structure in nucleus pulposus, 139:259
 central disk heights, 139:21
 colchicine in damaged disk syndrome, 143:183
 diagnosis of infection with gallium-67, 144:293
 herniation, lumbar
 lateral, extreme, 138:222
 simulation by tumors of pelvic girdle, 138:217
- Dislocation
 of hip
 and radiographic acetabular landmarks, 141:166
 traumatic, vascular and circulatory changes in, 140:255
- of knee. *See* Knee, recurrent dislocation of patella laterality of, related to handedness, 143:158
- metatarsophalangeal, irreducible, 145:224
- of radioulnar joint, distal, 144:154
- sacroiliac, bilateral, in adolescent, 143:191
- of shoulder
 bilateral anterior, 140:21
 irreducible, 139:167
- sternoclavicular
 computed tomography in, 140:12
- in infant, 139:68
 operative repair of, 140:17
- thoracolumbar fracture dislocations, treatment of, 142:168
- Distraction, leg lengthening by, and viscoelastic behavior of tissue, 139:102
- L-Dopa, and healing of fractures, 142:244
- Down's syndrome, atlanto-axial subluxation in, 140:66
- E**
- Elbow
 in anterior interosseous nerve entrapment, 142:176
 modified posterolateral approach to, 144:151
 ulnar nerve compression at, medial epicondylectomy in, 139:174
- Electric current
 constant direct current affecting osseous defect, 142:219
 and healing of fractures, 145:239
 and healing of osteotomized radius, 145:245
 and spinal instrumentation in scoliosis, 139:28
 and osteogenesis, 141:266; 145:300
- Electrical potentials, in deer antlers, 142:237
- Electromyography, in sit-up exercises, 145:172
- Electron microscopy
 of acid phosphatase in giant cell tumor of bone, 141:295
 of banded structures in nucleus pulposus, 139:259
 of bone lining cells
 and effects of calcitonin, 139:250
 and effects of parathyroid hormone, 138:254
 of cartilage in connective tissue disorders, 143:251
 of collagen fibers in articular cartilage, 139:267
 of Morton's neuroma, 141:256; 142:73
- Elevation of limbs, and tissue pressure affecting muscle oxygenation, 144:311
- Embolism
 fat, and prophylactic therapy, 143:211
 pulmonary
 and hydroxychloroquine prophylaxis in hip surgery, 144:174
- Embolization, arterial, use in bone tumors of childhood, 139:133
- Ender nails, in trochanteric fractures of femur, 138:231; 142:262
- Epicondylectomy, medial, for ulnar nerve compression, 139:174
- Epilepsy, and osteomalacia from anticonvulsants, 139:216
- Epiphyseal osteochondroma, of anterior cruciate ligament. 139:86
- Erythromelalgia, 144:249
- Estrogen
 and mechanical strength of growth plate, 145:264
 role in osteoporosis, 144:286

Exercise

sit-up, EMG recordings in, 145:172
temporary, and joint changes during immobilization, 144:321

F

Familial conditions

and cartilage ultrastructure in connective tissue disorders, 143:251
congenital vertical talus, 139:128
Mediterranean fever, 143:81
osteochondritis dissecans of knee, 140:131
perforating ulcers of foot, 140:189
spondyloarthropathies, 143:10
sympathalgism, distal, 141:251
trigger thumb, 143:167

Fasciotomy, in rattlesnake bites, 140:55

Fat embolism syndrome, prophylaxis of, 143:211
Fatigue fracture, of pubic bones, in obesity, 142:182

Femur

Buck's traction in fractures of, 140:2
bursal osteochondromatosis of, 144:269
closed insertion of prebent Sampson rod, 138:238
fetal anteversion as factor in osteoarthritis, 145:213
fractures in gunshot wounds, 140:27
fractures simulating infection in myelomeningocele, 144:255
ipsilateral fracture of femur and tibia, 142:115
Legg-Calvé-Perthes disease
synovial osteochondromatosis with, 145:179
treatment programs in, 139:70
lysis of neck in hip arthroplasty, 145:208
medullary nailing of, 138:51. *See also* Medullary nailing
neck fractures
Deyerle fixation in, 144:178
internal fixation of, 141:199, 203
and osteoporosis of spine, pelvis and hand, 139:156
subcapital, effects of (*Letters*), 141:310
non-union of, treatment of, 138:141
compression plate in, 138:154
Vidal-Adrey external fixation in, 140:122
in osteoarthritis, and alkaline and acid phosphatase activity in subchondral bone, 140:85
osteonecrosis of head, 140:273
alcohol-induced, 143:222
pathological changes in, 139:283
tissue biology of, 138:284
patellofemoral disorders, 144:2
patellofemoral pain, infrapatella strap in, 139:179
shaft fractures
comminuted, 138:74
follow-up of plate fixation in, 138:62, 74
internal fixation of, 138:5

and negative experiences with pins-in-plaster, 138:243
and prophylaxis of fat embolism syndrome, 143:211

slipped capital epiphysis
hormonal factors in, 145:264
long-term results of treatment of, 141:176
pinning *in situ*, 141:181

subtrochanteric fractures treated with Zickel nail, 141:213
supracondylar fractures of, internal fixation of, 138:9, 77

trochanteric fractures of
compression screw in, 141:184
Ender nails in, 138:231; 142:262
in geriatric patients, 138:41, 141:188
internal fixation of, 138:3, 30, 41
Vidal-Adrey external fixation of
in infected non-union, 140:122
in open fracture, 140:111

Fetal alcohol syndrome, orthopedic aspects of, 139:58
Fibroblasts, in tissue culture, synovial fluid affecting, 138:279

Fibula

bicycle spoke fracture of, 144:230
cyst of, subchondral, 144:212
fractures at distal tibiofibular syndesmosis, 143:138
non-union of
infected, Vidal-Adrey external fixation in, 140:122
treatment of, 138:141

transfer for congenital absence of fibula, 139:97
Finger joints, compression arthrodesis of, 145:193.
See also Hand

Fixation of fractures

external, Vidal-Adrey system in, 140:111, 122
internal, 138:2
Deyerle method for femoral neck fractures, 144:178

Flatfoot development, and accessory navicular bone, 144:233

Foot. *See also* Hallux rigidus; Hallux valgus
accessory navicular and flatfoot development, 144:233

anatomy of forefoot, 142:10
arthrodesis of first metatarsophalangeal joint, 142:48

in bicycle spoke fracture, 144:230
chevron osteotomy for hallux valgus, 142:44
congenital vertical talus, 139:128

dysvascular lesions of, 142:110
evaluation of adult forefoot, 142:19
Freiberg's infraction of, 142:93
interdigital clavus, 142:103
irreducible metatarsophalangeal dislocations, 145:224

jogger's foot (*Letters*), 141:308
metatarsus primus varus, 145:217
Morton's metatarsalgia, 141:256; 142:4. *See also*

metatarsalgia, Morton's
onychocryptosis, 142:96
radiologic features in females, 145:217
replantation of forefoot, 139:182
rerupture of tendoachilles after nonsurgical treatment, 140:175
silicone implant arthroplasty of great toe, 142:30
ski boot compression syndrome, 140:109
symposium on disorders of forefoot, 142:2
toe function in walking, jogging and running, 142:24
ulcers of
 oxacillin in, and clostridial myonecrosis development, 138:250
 perforating, hereditary, 140:189
Footprints, in management of clubfeet, 140:32
Forearm. *See also Radius; Ulna*
 non-union of fractures in, treatment of, 138:141
Forefoot. *See Foot*
Fractures(s). *See also specific sites of fractures*
 and closed insertion of prebent Sampson femoral rod, 138:238
 computerized tomography in, 139:147
 fatigue, of pubic bones, in obesity, 142:182
 in gunshot wounds of low velocity, 140:26
 healing of
 biomechanical aspects of, 138:175
 calcitonin affecting, 141:303
 L-dopa affecting, 142:244
 electric current affecting, 142:219; 145:239
 with prebending of compression plates, 138:167
 and x-ray detection of osseous union, 142:234
 internal fixation of, 138:2
 aims of, 138:23
 evolution of concepts in, 138:26
 laterality of, related to handedness, 143:158
 medullary nailing in, 138:45,51. *See also Medullary nailing*
 non-union of
 and compression plate for long bones, 138:154
 and internal fixation of long bones, 138:141
 and Vidal-Adrey external fixation in infections, 140:122
 oblique, and orientation of transfixation screws, 143:271
open
 internal fixation in, 138:20, 120, 132, 138
 and Mumford spike procedure in tubular bones, 140:92
 Vidal-Adrey external fixation in, 140:111
pathologic
 in cytomegalic inclusion disease, 144:280
 of hand, in Paget's disease, 143:168
 in hemophilia, 138:211
and pseudarthrosis of forearm, with neurofibromatosis, 139:125

Fracture-dislocations, thoracolumbar, treatment of, 142:168
Freiberg's infarction, metatarsal, 142:93
Fungus infections
 coccidioidomycosis of spine, 140:78
 osteomyelitis in (*Letters*), 138:311
 osteomyelitis in heroin users, 144:243
Fusion, lumbosacral, with spinous process as graft, 140:72

G

Ganglion, in peroneus longus muscle, and peroneal nerve compression, 140:172
Gas gangrene, after oxacillin in foot ulcers, 138:250
Gentamicin, affecting shear and interface strengths of bone cement, 141:96
Geriatric patients
 osteoporosis of spine, pelvis and hand in patients with femoral neck fractures, 139:156
 treatment of hip fractures, 141:196
 trochanteric femoral fractures in, internal fixation of, 138:41; 141:188
Giant cell tumor of bone, acid phosphatase localization in, 141:295
Giliberty bipolar hip units, 141:169
Glomus tumor, treatment with prostaglandin inhibition, 143:171
Glucagon, role in osteoporosis, 144:289
Glucocorticoids. *See Corticosteroids*
Glucose, hypertonic, in prophylaxis of fat embolism syndrome, 143:211
Gluteal artery laceration, in iliac bone graft surgery, 140:204
Gonarthrosis, knee prosthesis in, 145:126
Grafts
 allograft joint transplantation (*Letters*), 141:307, 308
 and bone inductive capacity of transplant materials, 140:208
 and bone peg fixation in osteochondritis dissecans of knee, 143:125
 of iliac bone, and gluteal artery laceration, 140:204
 muscle flap transposition for lower extremity defects, 143:200
 and spinous process use in lumbosacral fusion, 140:72
 tibial tubercle transfer in patellar dislocations, 144:43
 transfer of fibula for congenital absence of tibia, 139:97
Growth hormone, role in osteoporosis, 144:289
GUEPAR knee prosthesis
 hinge type, 145:91
 results and late complications with, 140:145

Gunshot wounds, low velocity, conservative treatment of, 140:26

H

Hallux rigidus, 142:57

and arthrodesis of first metatarsophalangeal joint, 142:48

simple operation for, 142:55

Hallux valgus

and arthrodesis of first metatarsophalangeal joint, 142:48

chevron osteotomy in, 142:44

and forces under foot before and after surgery, 142:64

Halofemoral traction, in thoracolumbar dislocations, 142:168

Hand

bipartite trapezium with adduction contracture of thumb, 145:199

compartment syndrome of interosseous muscles, 140:23

compression arthrodesis of finger joints, 145:193

distal symphalangism in, 141:251

familial trigger thumb, 143:167

fractures in gunshot wounds, 140:27

glomus tumor treated with indomethacin, 143:171

infection from *Acinetobacter calcoaceticus*, 140:184

metacarpophalangeal arthroplasty with flexible silastic implants, 140:178

osteoporosis of, in patients with femoral neck fractures, 139:156

pathologic fractures in Paget's disease, 143:168

Handedness, and laterality of fractures and dislocations, 143:158

Harrington instrumentation

in scoliosis, results of, 144:128

in thoracolumbar fracture dislocations, 142:168

Hauser procedure, in recurrent patellar dislocation, 144:27

late results of, 140:137

Healing

of fractures. *See Fracture(s)*, healing of

of osteochondral defects, collagen sponge implants affecting, 144:326

of osteotomized radius, magnetic fields affecting, 145:245

Hemangioma, and leg length discrepancy, 144:210

Hemarthrosis, in hemophilia, 138:201

Hemihypertrophy, congenital, 144:198

Hemophilia, orthopedic problems in, 138:197

Hemorrhage into muscle, in hemophilia, 138:209

Heparin, low-dose, with warfarin, after hip replacement, 141:134

Hereditary disorders. *See Familial conditions*

Herniation of lumbar disks

lateral, extreme, 138:222

simulation by tumors of pelvic girdle, 138:217

Heroin users

compartment syndrome of interosseous muscles of hand, 140:23

skeletal infections in, 144:238

Hip

derangement of, and muscle shortening in cerebral palsy, 144:186

disarticulation of, and preservation of functional above-knee stump, 141:217

disease in Mseleni, 141:223

dislocation of

and radiographic acetabular landmarks, 141:166

traumatic, vascular and circulatory changes in, 140:255

fractures in senile patients, 141:196

intertrochanteric fracture of. *See Femur, trochanteric fractures*

osteoarthritis of

and alkaline and acid phosphatase activity in subchondral bone, 140:85

fetal femoral anteversion as factor in, 145:213

replacement of

and antibiotics in subacute sepsis, 141:143

and determination of successful surgery, 141:44

and femoral reaming with cement implantation, 141:74

and femoral shaft perforation, 141:158

and fracture of Charnley prosthesis, 141:29

and gentamicin affecting shear and interface strengths of cement, 141:96

Gilbert bipolar units in, 141:169

and hydroxychloroquine prophylaxis of pulmonary embolism, 144:174

and intramedullary pressure patterns, 145:183

after infection in opposite hip, 141:138

and long-term follow-up of Charnley arthroplasty, 141:28

and loosening of stem prosthesis, 141:17, 66

and lysis of femoral neck, 145:208

madreporic implant for, uncemented, 141:2

and management of fractured stem, 141:71

and mechanical properties of femoral stems, 141:55

and mechanisms of arterial injury, 141:122

and methylmethacrylate metabolism in man, 141:90

and prophylactic anticoagulation, 141:134

risk factor assessment in, 141:50

titanium alloy prosthesis in, 144:166

trochanteric osteotomy in, 141:102, 111

and wear of acetabular components, 145:277

- septic arthritis of, in children, 139:81
 surgery in hemophilia, 138:207
 synovial chondromatosis with Turner's syndrome, 144:183
 Historical aspects, of orthopedic practice, 139:2
 HLA-B27 antigen, in spondyloarthropathies, 143:8, 11, 15
 Hormonal factors
 in mechanical strength of growth plate, 145:264
 in metabolism of skeletal tissue in culture, 142:196
 in osteogenic sarcoma growth, 140:247
 in osteoporosis, 144:284
 Humerus
 bilateral fracture of surgical neck in osteomalacia, 143:148
 fracture in gunshot wounds, 140:27
 medial epicondylectomy for ulnar nerve compression, 139:174
 non-union of, treatment of, 138:141
 compression plate in, 138:154
 Vidal-Adrey external fixation in infections, 140:122
 open fracture of, Vidal-Adrey external fixation in, 140:111
 Hurler's syndrome
 cartilage ultrastructure in, 143:251
 plasma infusions or leukocyte transfusions in, 140:194
 Hydroxychloroquine, for pulmonary embolism prevention in hip surgery, 144:174
 5-Hydroxyindole acetic acid, in synovial fluid and plasma, in joint diseases, 139:232
 Hyperostosis, infantile cortical, 144:276
 Hyperparathyroidism, vitamin D metabolism in, 139:215
 Hypertrophy, and leg length discrepancy, 144:198
 Hypoparathyroidism, vitamin D metabolism in, 139:214
 Hysteria, and low back pain, 140:42; 145:158
- I**
- α -L-Iduronidase, activity in leukocytes and plasma, after treatment of mucopolysaccharidosis, 140:194
 Iliac bone graft surgery, gluteal artery laceration in, 140:204
 Immobilization, and joint changes after temporary exercise, 144:321
 Indomethacin
 in glomus tumor, 143:171
 in spondyloarthropathies, 143:85
 Induction of bone, in soft tissue, control of, 143:245
 Inductive capacity, of bone transplant materials, 140:208
 Infections. *See also* Septic arthritis
- antibiotics in subacute sepsis of hip, 141:143
 with GUEPAR knee prosthesis, 140:145
 of hand, from *Acinetobacter calcoaceticus*, 140:184
 hip replacement following infection in opposite hip, 141:138
Mycobacterium abscessus, in knee joint, 140:162
 mycotic. *See* Fungus infections
 in myelomeningocele, simulation by lower extremity fractures, 144:255
 in non-union of fractures, Vidal-Adrey external fixation in, 140:122
 and penetration of gown material by organisms, 141:237
 routes of, studies with tracer particles, 129:150
 septicemia after sinogram, 145:187
 skeletal, in heroin users, 144:238
 Infrapatellar tendon, bilateral traumatic rupture of, 142:131
 Insulin, role in osteoporosis, 144:289
 Interosseous muscles of hand, compartment syndrome of, 140:23
 Interosseous nerve, anterior, entrapment of, 142:176
 Intestines, vitamin D action on, 129:211
- J**
- Jogger's foot (*Letters*), 141:308
 Jogging, function of toes in, 142:24
- K**
- Kidney
 failure of, and osteodystrophy, 139:222
 renal cell carcinoma
 metastasis to skeletal muscle, 145:227
 regression of osseous metastasis in 138:246
 vitamin D action on, 139:212
 Kiloh-Nevin syndrome, 142:176
 Knee
 acute dislocation of patella, in children, 139:88
 arthrodesis in hemophilia, 138:206
 arthroscopic examination of, 144:45
 bilateral traumatic rupture of infrapatellar tendon, 142:131
 biomechanics of patellofemoral joint, 144:9, 51, 70
 chondromalacia of, 144:22, 55. *See also* Chondromalacia patellae
 dorsal defect of patella with cartilaginous involvement, 143:131
 epiphyseal osteochondroma of anterior cruciate ligament, 139:86
 extension contracture in meningomyelocele, 144:260
 extensor reconstruction of, 144:36
 peroneal nerve paralysis from, 140:169

floating, in ipsilateral fractures of femur and tibia, 142:115
infections in heroin users, 144:242
injuries in women, 143:120
instability of
 chronic anteromedial, 142:123
 experimental, 140:262
lipids in joint tissues, 143:260
meniscal ossicles, 144:272
Mycobacterium abscessus infection of, 140:162
osteoarthritis, patellofemoral, 144:22, 70
osteochondritis dissecans
 bone peg fixation in, 143:125
 familial, 140:131
Paget's disease of patella, 142:139
pain in
 chondromalacia, 144:64
 infrapatellar strap in, 139:179
 and rational approach to treatment, 144:107
 Z-plasty retinacular release in, 144:110
patellectomy, 144:84, 103
patellofemoral disorders, 144:2
popliteal cysts, 144:215
posterior cruciate ligament injuries, 143:107
radiology of patellofemoral joint, 144:56
 tangential studies in, 144:16
reconstruction with cruciate ligament stents, 143:90
recurrent dislocation of patella
 extensor mechanism reconstruction in, 144:36
 Hauser procedure in, 140:137, 144:27
 Roux-Goldthwait procedure in, 144:4, 27
 semitendinosus tenodesis in, 144:31
 tibial tubercle transfer in, 144:43
regeneration of meniscus after synovectomy, in rabbits, 141:287
repair of torn anterior cruciate ligament, 143:97
replacement of, 144:91, 98, 103; 145:2
 anametic arthroplasty in, 145:85
 bilateral, under one anesthetic, 140:153
 clinical analysis of polycentric and geometric arthroplasties, 145:37
 and development of arthroplasty procedures, 145:101
experience in Imperial College and London Hospital, 145:47
experience in Robert Breck Brigham Hospital, 145:78
in gonarthrosis, 145:126
GUEPAR arthroplasty results and late complications, 140:145
GUEPAR hinge prosthesis in, 145:91
Kodama-Yamamoto prosthesis in, 145:60
madreporic prosthesis in, 145:94
and polycentric arthroplasty, 145:23, 37
and predictive range of motion, 143:115
in rheumatoid arthritis, 145:117
and spherocentric arthroplasty, 145:110
total condylar prosthesis, 145:68

and two-part arthroplasty, 145:
synovial shelf syndrome, 142:135
tourniquet time affecting quadriceps function, 143:194
varus deformity of, and compression osteotomy of tibia, 140:103
Z-plasty lateral retinacular release in compression syndrome, 144:110
Kodama-Yamamoto knee prosthesis, 145:60
Küntscher technique, for medullary nailing of femur, 138:56

L

Leg length discrepancy, with hypertrophy, 144:198
Leg lengthening
 in chondroplastic children, 144:194
 by distraction, and viscoelastic behavior of tissue, 139:102
 three methods in poliomyelitis, 145:150
Legg-Calvé-Perthes disease
 synovial osteochondromatosis with, 145:179
 treatment programs in, 139:70
Leukocytes, transfusions in mucopolysaccharidosis, 140:194
Ligament
 cruciate. *See Cruciate ligament*
 healing of, synovial fluid affecting, 138:279
 injury affecting ankle movement, 140:266
 posterior longitudinal, or cervical spine, ossification of, 140:58
Lipid, in knee joint tissues, 143:260
Low back pain
 and hysterical personality, 140:42; 145:158
 and lumbar disk herniation
 lateral, extreme, 138:22
 simulation by tumors of pelvic girdle, 138:217
Lumbar disk herniation
 lateral, extreme, 138:222
 simulation by tumors of pelvic girdle, 138:217
Lumbosacral fusion, with spinous process as graft, 140:72
Lymphangioma, and leg length discrepancy, 144:209

M

Madreporic prostheses
 for hip, 141:2
 for knee, 145:94
Magnetic fields, and healing of osteotomized radius, 145:245
Marfan syndrome, cartilage ultrastructure in, 143:251
Mediterranean fever, familial, 143:81
Medullary nailing, in fixation of fractures, 138:45, 51
 and closed insertion of prebent Sampson femoral rod, 138:238

Ender nails in trochanteric fractures of femur, 138:231; 142:262
 Küntscher technique with reaming, 138:56
Meningomyelocele. See Myelomeningocele
 Menisci, ossicles in, 144:272. *See also Knee*
 Menkes kinky hair syndrome, cartilage ultrastructure in, 143:251
 Metacarpophalangeal arthroplasty, with flexible silastic implants, 140:178
 Metatarsalgia, Morton's. *See* Morton's metatarsalgia
 Metatarsophalangeal dislocation, irreducible, 145:224
 Metatarsus primus varus, 145:217
 Microspheres
 albumin, in studies of routes of infection, 139:150
 radioactive, in bone blood flow measurements, 138:263
Mima polymorpha, hand infection from, 140:184
 Mineral content of bone, after tibia shaft fractures, 144:226
 Mobilization, early, in Legg-Calvé-Perthes disease, 139:70
 Monoamine oxidase, activity in joint diseases, 139:232
 Morton's metatarsalgia, 141:256; 142:4
 and nerve entrapment syndrome, 142:90
 pathologic changes in, 142:73
 in rheumatoid arthritis, 142:85
 Mseleni hip disease, 141:223
 Mucopolysaccharidoses
 cartilage ultrastructure in, 143:251
 plasma infusions or leukocyte transfusions in, 140:194
 Mumford spike procedure, in open fractures of tubular bones, 140:92
 Muscle
 clostridial necrosis after oxacillin in foot ulcers, 138:250
 flap transpositions for lower extremity defects, 143:200
 forces in thoracic spine, 139:28
 hemorrhage into, in hemophilia, 138:209
 interosseous, of hand, compartment syndrome of, 140:23
 myositis ossificans progressiva, with scoliosis, 139:49
 oxygenation affected by tissue pressure, 144:311
 peroneus longus replacement by ganglion, 140:172
 postural activity of, 145:4
 quadriceps function affected by tourniquet time, 143:194
 renal cell carcinoma metastasis to, 145:227
 shortening of, and hip derangement in cerebral palsy, 144:186
 spastic, pathology in cerebral palsy, 142:223
 tension, evaluation of by measuring intramuscular pressure, 145:293
Mycobacterium abscessus infection, of knee joint,

140:162
Myelomeningocele
 extension contracture of knee in, 144:260
 infection in, simulated by lower extremity fractures, 144:255
Myonecrosis, clostridial, after oxacillin in foot ulcers, 138:250
Myositis ossificans progressiva, with scoliosis, 139:49

N

Nailing. See Medullary nailing
Navicular bone, accessory, and flatfoot development, 144:233
Necrosis
 of bone. *See Osteonecrosis*
 clostridial myonecrosis after oxacillin in foot ulcers, 138:250

Nerve
 anterior interosseous, entrapment of, 142:176
 peroneal. *See Peroneal nerve*
 postural activity of, 145:4
 ulnar, compression at elbow, medial epicondylectomy in, 139:174

Neurofibromatosis
 with leg length discrepancy, 144:207
 with pseudarthrosis of forearm bones, 139:125
Neurologic dysfunction, and surgical morbidity, 145:189

Neuroma
Morton's. See Morton's metatarsalgia
 paramedian, presenting as ganglion, 140:45
Non-union of fractures. See Fracture(s), non-union of
Nucleus pulposus, banded structures in, 139:259
Nutrition
 calcium requirements and calcium therapy, 140:216
 commercial diets affecting orthopedic experiments, 138:271
 and vitamin D metabolism, 139:206

O

Obesity, and fatigue fracture of pubic bones, 142:182
Onychocryptosis, 142:96
Open fractures. See Fracture(s), open
Orthosis, thoracic suspension, 139:33
Ossicles, meniscal, 144:272
Ossification, of posterior longitudinal ligament of cervical spine, 140:58
Osteoarthritis
 and alkaline and acid phosphatase activity in subchondral bone from hips, 140:85
 and articular cartilage in experimental knee instability, 140:262

- patellofemoral, 144:22, 70
and persistent fetal femoral anteversion, 145:213
serotonin metabolism in, 139:232
- Osteochondral defects, healing affected by collagen sponge implants, 144:326
- Osteochondritis dissecans of knee
bone peg fixation in, 143:125
familial, 140:131
of talus, 144:264
- Osteochondroma, epiphyseal, of anterior cruciate ligament, 139:86
- Osteochondromatosis bursal, 144:269
synovial
with Legg-Calvé-Perthes disease, 145:179
with Turner's syndrome, 144:183
- Osteochondrosis, and Freiberg's infraction, 142:93
- Osteoclasts, origin of, 145:252
- Osteodystrophy, renal, vitamin D metabolism in, 139:222
- Osteogenesis, electrically stimulated, 141:266; 145:300
- Osteogenesis imperfecta scoliosis in, 145:163
spine deformity in, 139:40
spondylolisthesis from, 139:164
- Osteoma, osteoid of clavicle, 143:162
transplanted into athymic mice, 141:275
- Osteomalacia from anticonvulsants, 139:216
and bilateral humeral neck fracture, 143:148
in femoral neck fractures (*Letters*), 144:337
tumor-induced, 139:217
vitamin D metabolism in, 139:215
- Osteomyelitis from *Allescheria boydii* (*Letters*), 138:311
anaerobic, in childhood, 145:230
from *Arizona hinshawii*, 129:110
chronic, hyperbaric oxygen in, 144:121
in heroin users, 144:238
variolosa, osseous deformity from, 143:155
- Osteonecrosis of femoral head, 140:273
alcohol-induced, 143:222
pathological changes in, 139:283
tissue biology of, 138:284
- Osteoporosis hormonal factors in, 144:284
of spine, pelvis and hand in patients with femoral neck fractures, 139:156
treatment by manipulation of bone cell populations, 143:227
- Osteosarcoma hamster model of, 144:305
metabolic properties of cells in, 140:247
with Paget's disease of spine, 141:260
and preservation of functional above-knee stump after hip disarticulation, 141:217
- Osteotomy chevron, in hallux valgus, 142:44
compression, of tibia, 140:103
high tibial, and radionuclide joint imaging, 144:220
of radius, and magnetic fields affecting healing, 145:245
trochanteric, in hip replacement, 141:102, 111
wedge technique in hallux rigidus, 142:55
- Oxacillin, in foot ulcers, and clostridial myonecrosis development, 138:250
- Oxygen, hyperbaric, in chronic osteomyelitis, 144:121
- Oxygenation, muscle, tissue pressure affecting, 144:311
- P**
- Paget's disease of patella, 142:139
and pathologic fractures of hand, 143:168
of spine, osteosarcoma with, 141:260
- Pain in anterior interosseous nerve entrapment, 142:176
in erythromelalgia, 144:249
in Morton's metatarsalgia, 142:4
patellofemoral. *See Knee*, pain in
in scoliosis, advances in treatment of, 145:240
- Palsy cerebral. *See Cerebral palsy*
of peroneal nerve, after extensor reconstruction of knee, 140:169
- Parathyroid gland, vitamin D action on, 139:212
- Parathyroid hormone cellular effect of, 138:254
effects on skeletal tissue in culture, 142:196
role in osteoporosis, 144:285
and vitamin D metabolism, 139:208
- Patella. *See Knee*
- Pediatric orthopedics acute dislocation of patella, 139:88
adjuvant arterial embolization in bone tumors, 139:133
axial loading affecting healthy adolescent spines, 139:17
clavicular pseudarthrosis, congenital, 139:64
Clostridium perfringens septic arthritis, 139:92
cortical hyperostosis, infantile, 144:276
cytomegalic inclusion disease with pathologic fractures, 144:280
epiphyseal osteocnondroma of anterior cruciate ligament, 139:86
familial occurrence of congenital vertical talus, 139:128
fetal alcohol syndrome, 139:58
fibular transfer for congenital absence of tibia, 139:97
leg length discrepancy with hypertrophy, 144:198
leg lengthening in achondroplasia, 144:194

- Legg-Calvé-Perthes disease, 139:70
 osteochondritis dissecans of knee, familial, 140:131
 osteomyelitis
 anaerobic microorganisms in, 145:230
 from *Arizona hinshawii*, 139:110
 pseudarthrosis of forearm, with neurofibromatosis, 139:125
 radioulnar movements after fractures of forearm, 139:114
 sacral agenesis, 139:52, 145:168
 sacroiliac dislocations, bilateral, in adolescence, 143:191
 scoliosis. *See* Scoliosis
 septic arthritis of hip, 139:81
 spondyloarthropathies, seronegative, 143:76
 sternoclavicular joint dislocation in infant, 139:68
 thoracic suspension orthosis, 139:33
 traumatic bowing of forearm, 139:121
- Pelvis
 girdle tumors simulating herniated lumbar disks, 138:217
 injury of, and formation of bone and synovial joint, 140:80
 open fracture of, Vidal-Adrey external fixation in, 140:111
 osteoporosis of, in patients with femoral neck fractures, 139:156
 radiographic acetabular landmarks in, 141:166
- Peroneal nerve
 compression by ganglion, 140:172
 compression by ski boots, 140:109
 paralysis after extensor reconstruction of knee, 140:169
- Peroneus longus muscle, replacement by ganglion, 140:172
- Phenobarbital, osteomalacia from, 139:216
- Phenylbutazone, in spondyloarthropathies, 143:85
- Phosphate, and vitamin D metabolism, 139:208
- Physiotherapy, in spondyloarthropathies, 143:86
- Pin plate fixation, Deyerle method for femoral neck fractures, 144:178
- Pinning techniques, in slipped capital femoral epiphysis, 141:181
- Plasma infusions, in mucopolysaccharidoses, 140:194
- Plaster casts. *See* Casts
- Plate fixation
 and analysis of fracture healing with prebending of plates, 138:167
 in femoral shaft fractures, 138:62, 74
 in pseudarthroses of long bones, 138:154
- Poliomyelitis, tibial lengthenings in, 145:150
- Popliteal cysts, 144:215
- Postural activity, of muscle and nerve, 145:4
- Pressure
 intramedullary patterns of, 145:183
 intramuscular, during walking, 145:292
 tissue, and muscle oxygenation, 144:311
- Primitive man, orthopedic care for, 139:2
- Progesterone, and mechanical strength of growth plate, 145:264
- Prophylaxis
 and anticoagulants in hip replacement arthroplasty, 141:134
 and fat embolism prevention, 143:211
 hydroxychloroquine for pulmonary embolism prevention in hip surgery, 144:174
- Prostaglandin inhibition, in treatment of glomus tumor, 143:171
- Prostheses
 ankle joint, 142:141
 Austin-Moore, for preservation of functional above-knee stump, 141:217
 constrained, for shoulder joint, 144:135
 hip. *See* Hip, replacement of
 knee. *See* Knee, replacement of
 metacarpophalangeal, with flexible silastic implants, 140:178
 and rehabilitation of above-knee amputee with rigid dressings, 143:133
 silicone implant arthroplasty of great toe, 142:30
- Proteoglycans, cartilage, 139:190
- Protrusio acetabuli, idiopathic, 138:228
- Pseudarthrosis
 of clavicle, congenital, surgery in, 139:64
 of forearm bones, with neurofibromatosis, 139:125
 infected, Vidal-Adrey external fixation in, 140:122
 of long bones, compression treatment of, 138:154
 of tibial plateau fracture, 145:136
- Pseudohypoparathyroidism, vitamin D metabolism in, 139:213
- Pseudotumors, in hemophilia, 138:213
- Psoriatic arthritis, 143:8
 in childhood, 143:81
 clinical spectrum of, 143:66
 epidemiology of, 143:22
 radiology of, 143:43
 therapy in, 143:87
- Psychiatric patients, senile, treatment of hip fractures in, 141:196
- Psychological factors, in low back pain, 140:42; 145:158
- Pubic bones, fatigue fracture of, in obesity, 142:182
- Pulverization, and bone matrix morphogenetic activity, 141:281

Q

- Quadriceps function, postoperative, tourniquet time affecting, 143:194

R

- Radicular neuropathy, hereditary sensory, 140:189
Radioactive microspheres, in bone blood flow measurements, 138:263
Radiology
and acetabular landmarks, 141:166
and detection of osseous union in fractures, 142:234
of female foot, 145:217
of patellofemoral joint, 144:56
tangential visualization in, 144:16
and septic arthritis after arthrography, 145:237
and septicemia after sinogram, 145:187
of seronegative spondyloarthropathies, 143:38
Radionuclide imaging
gallium-67 in diagnosis of disk space infection, 144:293
in high tibial osteotomy, 144:220
in seronegative spondyloarthropathies, 143:46
Radiotherapy, in spondyloarthropathies, 143:85
Radioulnar joint
distal, dislocation of, 144:154
fracture of, and range of movements in childhood, 139:114
proximal, modified posterolateral approach to, 144:151
Radius
fracture of, and range of movements in childhood, 139:114
non-union of, treatment of, 138:141
compression plate in, 138:154
and Vidal-Adrey external fixation in infection, 140:122
open fracture of, Vidal-Adrey external fixation in, 140:111
osteotomy of, and magnetic fields affecting healing, 145:245
pseudarthrosis of, with neurofibromatosis, 139:125
styloid pain in De Quervain's disease, 143:165
traumatic bowing of, in children, 139:121
Rattlesnake bites, treatment of 140:50
Regeneration of meniscus, after synovectomy in rabbits, 141:287
Reiter's syndrome, 143:8
in childhood, 143:80
clinical spectrum of, 143:59
epidemiology of, 143:20
radiology of, 143:43
Renal cell carcinoma
metastasis to skeletal muscle, 145:227
regression of osseous metastasis in, 138:246
Replantation, of forefoot, 139:182
Retinaculum, lateral patellar, Z-plasty release in compression syndrome, 144:110
Rheumatic diseases, symposium on seronegative

- spondyloarthropathies, 143:2
Rheumatoid arthritis
bioassay values compared to clinical status, 144:299
compared to spondyloarthropathies, 143:8
Darrach procedure in (*Letters*), 138:310, 311
juvenile, 143:76
knee prosthesis in, 145:117
Morton's metatarsalgia in, 142:85
serotonin metabolism in, 139:232
wrist surgery in, 142:159
Rickets, vitamin D metabolism in, 139:215
Rotation
ankle, ligamentous injury affecting, 140:266
successive intervertebral measurements of, 139:22
Roux-Goldthwaite procedure, in recurrent patellar dislocation, 144:4, 27
Running, function of toes in, 142:24
Rupture of tendons
infrapatellar, bilateral traumatic, 142:131
rerupture of tendoachilles after nonsurgical treatment, 140:175

S

- Sacral agenesis, 139:52
anomalies with, 145:168
Sacroiliac joint
bilateral dislocations in adolescence, 143:191
infection in heroin users, 144:242
Sacroiliitis, in spondyloarthropathies, 143:8
Salmonella arthritis, in childhood, 143:81
Sampson femoral rod, prebent, closed insertion of, 138:238
Sanfilippo syndrome, cartilage ultrastructure in, 143:251
Sarcoma
osteogenic. *See* Osteosarcoma
of pelvic girdle, simulating herniated lumbar disks, 138:217
synovial, early clinical picture of, 142:185
Scanning of bone. *See* Radionuclide imaging
Scaphoid bone, accessory, and flatfoot development, 144:233
Scheie syndrome, plasma infusions or leukocyte transfusions in, 140:194
Scoliosis
and banded structures in nucleus pulposus, 139:259
congenital, operative treatment of, 143:174
Harrington instrumentation in, results of, 144:128
and muscle forces in thoracic spine, 139:28
myositis ossificans progressiva with, 139:49
in osteogenesis imperfecta, 139:40; 145:163
Screws, orientation across oblique fractures, 143:271
Semitendinosus tenodesis, in recurrent dislocation of patella, 144:31

- Septic arthritis
 from *Bacillus cereus*, after arthrography, 145:237
 from *Clostridium perfringens*, 139:92
 in heroin users, 144:238
 of hip
 in children, 139:81
 Septicemia, after sinogram, 145:187
 Serotonin, metabolism in joint diseases, 139:232
 Sex hormones, and mechanical strength of growth plate, 145:264
 Shigella arthritis, in childhood, 143:81
 Shoulder
 arthrodesis of, posterior approach in, 139:169
 constrained total replacement of, 144:135
 dislocations of
 bilateral anterior, 140:21
 irreducible, 139:167
 synovial cyst in, with vascular compromise, 143:151
 Silastic implants, flexible, metacarpophalangeal, 140:178
 Silicone implant arthroplasty, of great toe, 142:30
 Silver salt additive, in acrylic bone cement, 143:266
 Sinogram, septicemia after, 145:187
 Sit-up exercises, electromyography in, 145:172
 Ski boots, compression syndrome from, 140:109
 Smallpox, osteomyelitis in, osseous deformity from, 143:155
 Snake bites, treatment of, 140:50
 Soft tissue
 bone induction in, 143:245
 muscle flap transpositions for lower extremity defects, 143:200
 Spastic muscle, pathology in cerebral palsy, 142:223
 Spine
 axial loading affecting, in healthy adolescents, 139:17
 cervical. *See Cervical spine*
 coccidioidomycosis of, 140:78
 computerized tomography of, 139:147
 deformity in osteogenesis imperfecta, 139:40
 disk pathology. *See Disk conditions*
 lumbosacral fusion, with spinous process as graft, 140:72
 osteomyelitis in heroin users, 144:241
 osteoporosis of, in patients with femoral neck fractures, 139:156
 Paget's disease of, osteosarcoma with, 141:260
 sacral agenesis, 139:52; 145:168
 scoliosis of. *See Scoliosis*.
 spondylolisthesis from osteogenesis imperfecta, 139:164
 successive intervertebral rotation measurements, 139:22
 thoracic, muscle forces in, 139:28
 thoracic suspension orthosis, 139:33
 thoracolumbar fracture dislocations, 142:168
 Spinous process, as graft in lumbosacral fusion, 140:72
 Spondylitis, ankylosing, 143:8
 articular pathology of, 143:30
 childhood onset of, 143:77
 clinical spectrum of, 143:53
 description by Bechterew, 143:4
 epidemiology of, 143:15
 radiology of, 143:40
 therapy in, 143:84
 Spondyloarthropathies, seronegative, 143:2
 in childhood, 143:76
 epidemiology of, 143:15
 and HLA-B27 antigen, 143:8, 11, 15
 radiology of, 143:38
 radionuclide joint imaging in, 143:46
 and stiffening of spine in flexion, 143:4
 therapy of, 143:84
 unifying concept for, 143:8
 Spondylolisthesis, from osteogenesis imperfecta, 139:164
 Spongialization, in patellar disease, 144:74
 Sports medicine opportunity (*Letters*), 142:262
 Sternocartilicular infections, in heroin users, 144:242
 Sternoclavicular joint
 dislocations of
 computed tomography in, 140:12
 in infants, 139:68
 operative repair of, 140:17
 internal derangement of, 141:247
 Steroid hormones, role in osteoporosis, 144:286
 Still's disease, 143:8
 Subluxation
 atlanto-axial, in Down's syndrome, 140:66
 of patella. *See Knee*, recurrent dislocations
 Supracondylar fractures of femur, internal fixation of, 138:9, 77
 Surgery
 arthrodesis. *See Arthrodesis*
 arthroplasties. *See Prostheses*
 computerized tomography in, 139:147
 in congenital pseudarthrosis of clavicle, 139:64
 in depressed lateral condylar fractures of tibia, 140:96
 and embolization technique in bone tumors of childhood, 139:133
 fibular transfer for congenital absence of tibia, 139:97
 in foot conditions. *See Foot*
 gluteal artery laceration in iliac bone graft surgery, 140:204
 Hauser procedure in recurrent dislocation of patella, 140:137; 144:27
 in hemophilia, 138:204
 of hip joint, 141:2. *See also Hip*
 historical aspects of, 139:2
 knee replacement. *See Knee*, replacement of

- leg lengthening. *See* Leg lengthening procedures in Legg-Calvé-Perthes disease, compared to conservative treatment, 139:70
- lumbosacral fusion with spinous process as graft, 140:72
- medial epicondylectomy for ulnar nerve compression, 139:174
- and morbidity in neurologic dysfunctions, 145:189
- in ossification of posterior longitudinal ligament of cervical spine, 140:58
- osteotomy. *See* Osteotomy
- and penetration of gown material by organisms, 141:237
- and peroneal nerve palsy after extensor reconstruction of knee, 140:169
- in rattlesnake bites, 140:55
- in rerupture of tendoachilles after nonsurgical treatment, 140:175
- in rheumatoid arthritis (*Letters*), 138:310, 311
- and routes of infection, 139:150
- in scoliosis
- congenital, 143:174
 - in spine deformity in osteogenesis imperfecta, 139:40
 - in spondyloarthropathies, 143:86
 - in sternoclavicular dislocation, 140:17
- tourniquet time affecting quadriceps function, 143:194
- in Vidal-Adrey external fixation system, 140:111, 122
- of wrist, in rheumatoid arthritis, 142:159
- zigzag incisions for improved exposure and scarring, 145:202
- Suspension orthosis, thoracic, 139:33
- Symphalangism, distal, 141:251
- Synovectomy, and regeneration of meniscus in rabbits, 141:287
- Synovial cyst of shoulder, with vascular compromise, 143:151
- Synovial fluid
- affecting fibroblasts in tissue culture, 138:279
 - bioassay in rheumatoid arthritis, compared to clinical status, 144:299
 - serotonin enzymic activities in joint diseases, 139:232
- Synovial osteochondromatosis
- with Legg-Calvé-Perthes disease, 145:179
 - with Turner's syndrome, 144:183
- Synovial shelf syndrome, in knee, 142:135
- Synovioma, early clinical picture of, 142:185
- T
- Talipes equinovarus, footprints in management of, 140:32
- Talus conditions. *See* Ankle
- Temperature
- barium sulfate affecting polymerization temperature of Surgical Simplex P, 145:287
- measurements with cement fixation in cervical spine, 139:276
- Tendon
- achilles, rerupture after nonsurgical treatment, 140:175
 - infrapatellar, bilateral traumatic rupture of, 142:131
- Tenodesis, semitendinosus, in recurrent dislocation of patella, 144:31
- Testosterone, role in osteoporosis, 144:286
- Tetracycline, use as vital stain, 140:240
- Thigh. *See* Femur
- Thoracic dysplasia, asphyxiating, cartilage ultrastructure in, 143:251
- Thoracic spine, muscle forces in, 139:28
- Thoracic suspension orthosis, 139:33
- Thoracolumbar spine
- osteomyelitis in heroin users, 144:241
 - treatment of fracture-dislocations, 142:168
- Thrombophlebitis, simulation by popliteal cyst, 144:215
- Thrombosis, venous
- coagulolysis assay in detection of, 142:190
- Thumb, adduction contracture with bipartite trapezium, 145:199
- Thyroid hormones, role in osteoporosis, 144:287
- Tibia
- avulsion fracture of attachment to posterior cruciate ligament, 143:107
 - bicycle spoke fracture of, 144:230
 - compression osteotomy of, 140:103
 - condylar fractures, 145:136
 - depressed lateral, 140:96
 - congenital absence of, fibular transfer for, 139:97
 - distal intra-articular fractures of, internal fixation of, 138:17, 103
 - fractures simulating infection in myelomeningocele, 144:255
 - high osteotomy of, and radionuclide joint imaging, 144:220
 - ipsilateral fracture of femur and tibia, 142:115
 - medullary nailing of, 138:52
 - non-union of, treatment of, 138:141
 - compression plate in, 138:154
 - and Vidal-Adrey external fixation in infection, 140:122
 - open fracture of
 - Mumford spike procedure in, 140:92
 - Vidal-Adrey external fixation in, 140:111
 - plateau fractures
 - internal fixation of, 138:12, 84, 94
 - pseudarthrosis of, 145:136
 - proximal, fractures of, 145:136
 - shaft fractures of
 - and bone mineral content changes, 144:226

- and prophylaxis of fat embolism syndrome, 143:211
 torsion measurements in, 145:154
 tubercle transfer in patellar subluxation, 144:43
- Titanium alloy hip prosthesis, 144:166
- Toe conditions. *See* Foot
- Toenails, ingrown, 142:96
- Tomography, computerized
 in orthopedic surgery, 139:142
 in sternoclavicular dislocations, 140:12
- Torsion, tibial, measurements of, 145:154
- Tourniquet time, and postoperative quadriceps function, 143:194
- Traction
 axial, affecting cervical spine, 140:47
 Buck's, in fractures of thigh, 140:2
 halofemoral, in thoracolumbar fracture-dislocations, 142:168
- Transfusions, leukocyte, in mucopolysaccharidosis, 140:194
- Transplantations. *See* Grafts
- Trapezium, bipartite, with adduction contracture of thumb, 145:199
- Trauma
 and bilateral rupture of infrapatellar tendon, 142:131
 and bowing of forearm in children, 139:121
 dislocations in. *See* Dislocation
 fractures in. *See* Fracture(s)
 gunshot wounds, low velocity, 140:26
 and internal derangement of sternoclavicular joint, 141:247
 ligamentous injury affecting ankle movement, 140:266
- Trephination, historical aspects of, 139:3
- Trochanteric fractures of femur. *See* Femur
- Tryptophan metabolism, in joint diseases, 139:232
- Tuberculosis, skeletal (*Letters*), 144:338
- Tuberculous osteomyelitis, in heroin users, 144:243
- Tumors
 of bone, in childhood, and adjuvant arterial embolization, 139:133
 computerized tomography in, 139:142
 early clinical picture of synovioma, 142:185
 epiphyseal osteochondroma of anterior cruciate ligament, 139:86
 giant cell, acid phosphatase localization in, 141:295
 glomus, treatment with prostaglandin inhibition, 143:171
 osteogenic sarcoma. *See* Osteosarcoma
 osteoid osteoma
 of clavicle, 143:162
 transplanted into athymic mice, 141:275
 and osteomalacia, 139:217
 paramedian neuroma presenting as ganglion, 140:45
- of pelvic girdle, simulating herniated lumbar disks, 138:217
- renal cell carcinoma
 metastasis to skeletal muscle, 145:227
 regression of osseous metastases, 138:246
- Turner's syndrome, synovial chondromatosis with, 144:183
- U**
- Ulcers of foot
 oxacillin in, and clostridial myonecrosis development, 138:250
 perforating, hereditary, 140:189
- Ulna. *See also* Radioulnar joint
 fracture of, and range of movements in childhood, 139:114
 non-union of, treatment of, 138:141
 compression plate in, 138:154
 open fracture of, Vidal-Adrey external fixation in, 140:111
 pseudarthrosis with neurofibromatosis, 139:125
 traumatic bowing of, in children, 139:121
- Ulnar nerve compression at elbow, medial epicondylectomy in, 139:174
- Ultrasound, transcutaneous, in dysvascular foot lesions, 142:110
- Ultrastructural studies. *See* Electron microscopy
- V**
- Varus deformity of knee, and compression osteotomy of tibia, 140:103
- Vasculature
 anomalies with hemihypertrophy, 144:205
 arterial embolization use in bone tumors of childhood, 139:133
 arteriosclerosis and dysvascular foot lesions, 142:110
 changes in hip after traumatic dislocation, 140:255
 femoral reaming affecting, in hip arthroplasty, 141:74
 gluteal artery laceration in iliac bone graft surgery, 140:204
 impairment in synovial cyst of shoulder, 143:151
 pulmonary embolism
 and hydroxychloroquine prophylaxis in hip surgery, 144:174
 severe arterial injury in hip joint surgery, 141:122
 thrombophlebitis simulation by popliteal cyst, 144:215
 venous thrombosis
 coagulolysis assay in detection of, 142:190
- Vertebra. *See* Spine
- Vidal-Adrey external fixation
 in infected non-unions, 140:122
 in open fractures, 140:111

Viscoelastic behavior of tissues, in leg lengthening by distraction, 139:102

Vitamin D

metabolism in health and disease, 139:206
therapy with, and calcium requirements, 140:216
transport of metabolites, 142:249

W

Walking

function of toes in, 142:24
intramuscular pressure during, 145:292

Warfarin, with low-dose heparin, after hip replacement, 141:134

Whipple's disease, 143:8

Wrist

arthrodesis of, 142:164
in De Quervain's disease, 143:165
intercarpal fusion for treatment of instability, 144:159

paramedian neuroma presenting as ganglion, 140:45

surgery in rheumatoid arthritis, 142:159

Y

Yersinia arthritis
in childhood, 143:81
clinical spectrum of, 143:64

Z

Zickel nail, in fractures of proximal femur, 141:213
Zigzag incisions, for improved exposure and scarring, 145:202
Z-plasty lateral retinacular release, in compression syndrome of knee, 144:110

Authors' Index—Volumes 138–145

A

- Abraham, E., 145:168
Ahlgren, O., 145:126
Ahmadi, B., 145:150
Akbarnia, B. A., 145:150
Albin, D., 139:276
Albright, J. A., 145:163
Allende, B. T., 142:164
Allgöwer, M., 138:26, 105, 132
Amstutz, H. C., 141:17, 111; 145:37
Anderson, L., 141:50
Andersson, S. M., 144:226
Andrish, J., 138:279; 139:52
Antopol, S. C., 143:162
Aprin, H., 144:260
Aubriot, J. H., 145:91

B

- Ball, J., 143:30
Banzon, M. T., 145:224
Baratz, M., 140:159, 162
Barmada, R., 144:212
Barnes, A. G., 143:171
Barron, D. W., 145:183
Barry, M., 144:9
Bartzke, G., 138:84
Baumann, J. U., 145:292
Bechterew, V. M., 143:4
Becker, M. H., 143:162
Becker, R. O., 141:266; 143:266; 145:239
Beljan, J. R., 142:219
Benson, M., 145:37
Berg, E., 138:310; 142:234
Bick, E. M., 139:2
Bierbaum, B. E., 141:102
Bigliani, L. U., 139:133
Binder, W., 138:62
Black, J., 140:262
Blakemore, W. S., 144:305
Blazina, M. E., 142:135; 144:98
Bleck, E. E., 145:172
Bliven, F. E. Jr., 142:234
Bluestone, R., 143:2, 53
Blumenfeld, E. L., 141:143
Böhler, J., 142:264
Bojsen-Møller, F., 142:10
Bonnett, C. A., 139:40; 143:174
Booth, A. D., 141:237
Booth, C. M., 140:17

- Borges, A. F., 145:202
Boswick, J. A. Jr., 140:178
Bowker, J. H., 140:172
Boyd, R. J., 141:311
Brandt, K. D., 144:215
Brettler, D., 140:26
Brighton, C. T., 140:240; 145:300
Broukhim, B., 142:135; 144:98
Brower, E. M., 139:17
Brown, J. C., 139:40; 143:174
Brown, R. H., 139:17
Bruce, D., 138:94
Brumfield, R. H., 142:159
Brunner, Ch., 138:62
Bryan, R. S., 145:23
Buck, G., 140:2
Buckwalter, J. A., 139:259
Bullough, P. G., 144:63
Bunnell, W. P., 140:12
Burger, E. H., 142:196
Burri, C., 138:84
Burstein, A. H., 141:55; 144:63
Burton, D. S., 140:23

C

- Cangemi, P. J., 143:222
Cannon, C. L., 138:217
Capen, D., 145:189, 193
Carroll, N. C., 140:131
Carver, D., 140:42; 145:158
Casscells, S. W., 144:45
Castle, M. E., 142:223
Ceder, L. C., 144:110
Chandler, R. W., 145:227
Chapman, M., 138:120; 141:303
Charnley, J., 141:138; 144:174
Chekofsky, K. M., 139:86
Childers, J. C. Jr., 144:114
Chisena, E., 140:262
Chrisman, O. D., 144:27
Christensen, S. B., 140:85
Chum, M., 144:84
Chvapil, M., 144:326
Cimino, W. R., 145:277
Clark, J. A., 139:102
Clark, N., 141:237
Clarke, R. P., 141:102
Cofield, R. H., 142:44
Cohen, N. J., 141:260
Coldewey, J., 138:84
Combs, S. P., 145:287

- Comp, P. C., 142:190
Conaty, J. P., 142:159
Conforty, B., 144:272
Conrad, G., 139:185
Constant, R. B., 141:310
Cook, R. S., 145:163
Cooper, R. R., 139:259
Corkill, J. A., 141:90
Cosgriff, S. W., 141:134
Coughlin, M. J., 142:57
Coulton, L. A., 140:247
Court-Brown, C. M., 143:148
Coventry, M. B., 145:29, 85
Cowell, H. R., 144:255
Cox, J. S., 140:37
Cracchiolo, A., III, 145:2, 37
Cristofaro, R. L., 139:40
Crout, D. H. G., 141:90
Crugnola, A., 145:277
Cullen, J. M., 145:239
Cupic, Z., 141:28
Curtis, B. H., 139:33
Curtis, R. S., 144:128

D

- Dahmers, L., 139:267
D'Ambrosia, R. D., 140:266
Danis, R., 138:23
Daruwalla, J. S., 139:114
Davidson, T. M., 140:50
Davis, J., 144:121
Davis, R. W., 142:237
Day, A. J., 141:181
Day, B., 143:125
Deburge, A., 145:91
DeCesare, W. F., 140:137
DeHaas, W. G., 145:245
DeLee, J. C., 142:115
Del Pizzo, W., 142:135; 144:98
Del Sel, H. J., 141:138
Derbes, V. L., 142:185
Dick, H. M., 139:133
Dickson, J. H., 144:128
Doherty, J. H., 141:184
Donnelly, P. J., 139:92
Dorfman, H. D., 141:295
Drennan, J. C., 139:33
Drezner, M. K., 139:206
Dudnikov, M., 139:58
Dunn, J. M., 144:121
Dussault, R., 144:16
Duthie, R. B., 138:197

Du Toit, G. T., 141:223
DuVries, H. L., 142:57

E

Ehrlich, M. G., 144:293
Eid, A. M., 144:338
Eilert, R. E., 139:97
Eismont, F. J., 141:55
Elbaz, R., 142:93
Ellwood, S. C., 144:114
Ender, H. G., 142:264
Erwin, W. D., 144:128
Esdaile, J., 143:46
Evanski, P. M., 140:42; 145:158
Evarts, C. M., 141:158
Ewald, F. C., 145:78
Eyanson, S., 144:215

F

Farine, I., 141:307; 144:194
Fernand, R., 139:49
Ficat, D., 144:74
Ficat, R. P., 144:55, 74
Fielding, J. W., 139:86; 144:43
Finerman, G. A. M., 141:275;
145:37, 85
Finsterbush, A., 144:276
Foltz, R. N., 141:66
Ford, D. K., 143:59
Fornasier, V. L., 141:256, 303;
142:215; 143:168
Forouzesh, S., 143:53
Fountain, S., 140:78
Fowles, J. V., 144:338
Fox, J. M., 142:135; 144:98
Freeman, M. A. R., 145:47
Fries, I., 142:146
Frost, H. M., 150:58; 143:227

G

Gaillard, P. J., 142:196
Ganel, A., 141:307; 144:194
Ganjavian, M-S., 145:150
Ganz, R., 138:30
Garfin, S. R., 140:50
Garland, D. E., 140:169;
145:189
Gauntt, C., 139:174
Gauthier, G., 142:90, 93
Gedeon, P., 144:74
Geist, R. W., 138:5
Genet, J. P., 145:91
Gerber, L. H., 143:133
Gerken, S. C., 144:299

Ghabadi, F., 145:150
Ghosh, L., 144:212
Giblin, P. E., 140:66
Gillespie, H. S., 143:125
Gillett, H. G. du P., 142:103
Glimcher, M. J., 138:284;
139:283; 140:273; 141:311
Gold, E. W., 143:222
Goodman, N. L., 138:311
Gordon, S. L., 144:337
Goss, T. P., 141:134
Gossling, H. R., 140:96
Gradillas, E. L., 140:153
Gradisar, I. A., Jr., 144:84
Graham, C. E., 140:72
Grant, T. T., 141:275
Gray, D. H., 143:245
Greene, R., 140:23
Greenwald, A. D., 141:96;
145:287
Greer, R. B., 141:50
Gregg, J. R., 143:260
Groves, R. J., 139:167
Gruber, M. A., 141:188
Gruen, T. A., 141:17
GUEPAR Group, 145:91
Gunther, S. F., 140:184
Guštilo, R. B., 143:211

H

Haber, J., 140:178
Haddad, J. G., Jr., 142:249
Ha'eri, G. B., 139:150; 141:256,
303
Hagy, J. L., 142:24
Hahn, G., 144:249
Hall, J. E., 144:31
Halpern, A. A., 140:23, 78;
141:251; 143:151; 145:172,
187, 213
Ham, O. E., 138:217
Hama, H., 145:264
Hamilton, H. W., 141:237
Hammerle, C. P., 138:30
Hanaoka, H., 145:252
Hänggi, A., 145:292
Hansen, S. T., 138:56
Hardy, J. R., 141:2
Harman, K., 138:243
Harrelson, J. M., 139:206
Harrington, P. R., 144:128
Hasson, N., 145:187
Haukeland, W., 138:231
Hawkins, D., 143:46
Heimbach, R. D., 144:121
Heiple, K. G., 139:81

Hekkelman, J. W., 142:196
Hellewell, A. B., 142:219
Helms, C. A., 139:142
Hensinger, R. N., 143:131
Herrmann-Erlee, M. P. M.,
142:196
Heslin, D. J., 139:88
Hestenes, O., 138:231
Hewes, T. F., 140:37
Hillman, F., 138:228
Hiroshima, K., 144:186
Hirschowitz, D. L., 141:111
Hirsh, L., 142:135
Hoek, K. J., 139:40
Hoerner, H. E., 142:185
Holmes, M. D., 144:326
Holmes, R., 138:279
Homsy, C. A., 143:90
Horacek, K., 145:37
Horner, H. E., 144:299
Horozowski, H., 141:307;
144:194
Horsman, A., 140:216
Houghton, G. R., 138:197
Howard, F. M., 140:103
Hoyt, W. A., Jr., 144:84
Huang, T. L., 141:260; 144:212
Hughes, J. L., 138:111
Hughes, P. W., 141:143
Hughston, J. C., 140:169; 144:36
Hungerford, D. S., 144:9, 55
Hunter, L. Y., 143:131
Husseini, N., 144:276
Hutton, W. C., 142:64

I

Ichinose, H., 142:185
Igari, T., 139:232
ingleton, P. M., 140:247
Inglis, A. E., 140:145, 175
Insall, J. N., 140:145; 144:63;
145:68
Ivey, F. M., 144:98

J

Jablon, M., 144:135
Jacocks, R., 142:190
James, M. L., 141:90
James, S. L., 143:90
Javier, M., 145:187
Jayakumar, S. S., 139:97
Johnson, K. A., 142:44
Johnson, R., 144:174
Johnston, A. D., 139:133
Jones, E. C., 140:145

Jones, R. E., 139:174
 Jones, R. P., 140:21

K

Kahanovitz, N., 143:174
 Kahn, B., 140:204
 Kahn, D. S., 140:80
 Kalamchi, A., 139:52
 Kamali, M., 142:131
 Kamhin, M., 144:194
 Kammerer, W. S., 141:50
 Katz, J. F., 141:166
 Kaufer, H., 144:51; 145:110
 Keagy, R. D., 144:269
 Kenesi, C., 145:94
 Kenzora, J. E., 138:284; 139:283; 140:273
 Khermosh, O., 140:162
 Kier, L., 140:47
 Kilfoyle, R. M., 144:260
 Kim, E. E., 144:220
 Kim, J.-M., 141:287
 King, R. V., 144:311
 Kinman, P. B., 145:136
 Kinoshita, T., 138:263
 Klein, M. J., 143:162
 Kling, J. M., 142:234
 Köberle, G., 141:310
 Kopf, E. H., 143:171
 Kopta, J. A., 142:190
 Korhonen, L. K., 140:208
 Korostoff, E., 145:300
 Kotcamp, W. W., 140:189
 Krempen, J. F., 140:111, 122
 Krugmire, R. B., Jr., 144:311
 Kuhnen, W., 139:167
 Kumar, K., 140:32
 Kummer, F. J., 141:2
 Kuner, E., 138:45, 111
 Kuo, K. N., 144:183

L

Laaveg, S. J., 139:68
 Lake, F. T., 142:237
 Lambert, D. C., 138:77
 Lampert, M., 143:133
 Lance, E. M., 142:146
 Lane, J. M., 140:262
 Langan, P., 141:169
 Langer, F., 141:308
 Laros, G. S., 138:2
 Larsen, I., 142:146
 Larson, R. L., 144:110
 Larsson, S-E., 145:117, 126
 Laskin, R. S., 141:188
 Lassmann, G., 142:73

Latta, L. L., 144:166; 145:136, 208
 Laurin, C. A., 144:16
 Lazarovici, M. A., 145:245
 Lentz, M. W., 143:155, 200
 Leonard, M. H., 145:193
 Leong, J. C. Y., 139:102
 Levesque, H. P., 144:16
 Levine, J., 139:179
 Levinsohn, E. M., 140:12
 Light, T. R., 139:110; 145:230
 Liebler, W. A., 144:43
 Lindenbaum, B. L., 140:109
 Lindholm, T. S., 141:275
 Ling, R. S. M., 141:90
 Lipscomb, P. R., 142:48
 Lone, F. J., 141:237
 Loprete, F. L., 141:196
 Lord, G. A., 141:2
 Lotem, M., 144:272
 Louis, D. L., 143:194
 Lowe, L. W., 142:64
 Lumsden, R. M., 142:30
 Lunseth, P. A., 139:81
 Luscher, J. N., 138:74
 Lusskin, R., 143:162
 Lyden, J. P., 141:184
 Lynch, J. J., 140:21
 Lyne, E. D., 141:176

M

Ma, R. Y. P., 139:102
 MacEwen, G. D., 139:52, 64
 Macfarlane, J. D., 144:215
 Macnicol, M. F., 143:148
 Maehara, T., 140:58
 Magerl, F., 138:62
 Mahoney, M., 138:120
 Makin, M., 139:156
 Malekafzali, S., 145:154
 Mann, R. A., 142:24, 57
 Manske, P. R., 139:125
 Maquet, P., 144:70
 Marcove, R. C., 141:217
 Marino, A. A., 145:239
 Markolf, K. L., 141:111
 Marmor, L., 144:299
 Marshall, D. H., 140:216
 Marshall, J. L., 143:97
 Martens, M., 141:199, 203
 Martin, R. B., 138:271
 Martin, T. J., 140:247
 Masi, A. T., 143:15
 Matejczyk, M.-B., 141:96
 Matsen, F. A., III, 144:311
 Matter, P., 138:132
 Matthews, L. S., 145:110
 Maynard, J. A., 139:259
 Mays, J. D., 142:159
 McAdoo, W. G., 141:44
 McBeath, A. A., 141:66
 McBroom, R., 138:94
 McCarthy, E. F., 141:295
 McCullough, C. J., 144:264
 McKusick, K., 144:293
 McLaughlin, R. E., 139:276
 McManama, G. B. Jr., 144:31
 McManus, F., 139:88
 McMaster, W. C., 138:238
 McMillan, R. D., 141:217
 McNeice, G. M., 141:2
 Meals, R. A., 143:158
 Medsger, T. A. Jr., 143:15
 Melick, R. A., 140:247
 Melo, J. C., 139:92
 Menczel, J., 139:156
 Mendes, D. G., 140:26; 144:230
 Meyer, R. P., 141:122
 Micheli, L. J., 140:66; 144:31
 Michelsen, W. J., 139:133
 Michelson, J.-E., 144:321
 Micik, Z., 138:311
 Miki, T., 145:264
 Milgram, J. W., 144:269; 145:179
 Miller, H., 144:135
 Miller, W. A., 144:233
 Miller, W. E., 140:92
 Mirra, J. M., 141:275
 Miskew, D. B. W., 138:250
 Miyazaki, A., 140:58
 Mizushima, T., 140:194
 Moberg, E., 142:55
 Moll, J. M. H., 143:66
 Mølster, A., 138:231
 Montanaro, A., 138:222
 Moon, M.-S., 141:287
 Moore, T. M., 145:227
 Morawa, L. G., 141:176
 Moran, J. M., 141:96
 Moreland, J. R., 145:47
 Morgan, J. R., 142:237
 Morrey, B. F., 139:142; 142:44; 144:121
 Morrison, D. M., 145:245
 Morrissey, R. T., 144:154
 Moshel, M., 144:230
 Morton, T. G., 142:4
 Mubarak, S. J., 140:50, 131
 Muggler, E., 138:84
 Muhr, G., 138:41
 Mulier, J. C., 141:199, 203
 Muller, M. E., 138:141
 Murachi, S., 143:251
 Murray, W. R., 142:96

N

- Nachbur, B., 141:122
Nagel, D. A., 140:78
Nalebuff, E. A., 144:154
Nash, C. L., Jr., 139:17
Nasr, E., 141:217
Nasseri, D., 145:150
Neale, H. W., 143:200
Nehemkis, A. M., 140:42; 145:158
Nehme, A.-M. E., 144:198
Nelson, C. L., 141:74
Nelson, V., 139:58
Newton, S. E., III, 142:141
Nicholls, P. J., 142:234
Nichols, T., 140:23
Nijweide, P. J., 142:196
Nilsson, J. E., 139:121; 144:226
Nishioka, J., 140:194
Nixon, J. E., 143:260
Nogami, H., 143:251
Nordin, B. E. C., 140:216
Norimatsu, H., 138:254; 139:250
Norris, S., 144:293
Noyes, F. R., 143:155, 200
Nunamaker, D. M., 138:167

O

- Ogata, K., 139:128; 145:273
Ogden, J. A., 139:110; 145:230
Ogilvie-Harris, D. J., 143:168
Ogino, T., 143:251
Ohkubo, Y., 138:246
Oikarinen, J., 140:208
Oka, M., 145:264
Oki, T., 143:251
Okubo, M., 138:263
Olerud, S., 138:231; 142:262, 266
Olin, F. H., 140:172
Ono, K., 140:194; 144:186
Oohira, A., 143:251
Ozeki, K., 143:251

P

- Pace, N., 142:237
Panjabi, M. M., 140:47; 143:271
Pankovich, A. M., 138:250; 143:138
Papo, I., 140:159
Pappas, A. M., 144:198
Parker, H. G., 142:123
Parlasca, R., 140:266
Patterson, R. L. Jr., 142:146
Paul, D. F., 139:142
Paul, I., 145:277

Paval, A., 142:146

- Pederson, H. E., 144:178
Pekman, W. M., 139:58
Perren, S. M., 138:167, 175
Peterson, C. A., 140:96
Peterson, L. F. A., 145:23
Phelps, D. B., 140:178
Philippe, J., 144:55
Phillips, W. A., 138:17
Pick, R. Y., 143:165
Pickett, J. C., 144:2, 103
Pierce, R. O., Jr., 141: 247
Pinzur, M. S., 138:250
Pogrand, H., 139:156; 144:337
Pollack, S. R., 145:300
Post, M., 144:135
Postacchini, F., 138:222
Powers, J. A., 143:120
Pratt, A., 140:47
Prewitt, J. M., III, 143:90
Price, G. F. W., 145:217
Pryor, M., 143:191
Puglisi, A. S., 144:43

Q

- Quigley, T. B., 142:262

R

- Rab, G. T., 139:28
Rabinowitz, J. L., 143:260
Radin, E. L., 144:107; 146:277
Raff, M. J., 139:92
Rag, J. P., 145:224
Ranawat, C. S., 140:145
Rang, M., 139:88; 144:249
Rask, M. R., 139:164; 140:45; 141:308; 142:176, 182; 143:171, 183
Raustad, T. S., 138:231
Reed, J., 143:133
Reger, S. I., 139:276
Reichmanis, M., 145:239
Reider, B., 143:97
Reimann, I., 140:85
Renshaw, T. S., 139:33; 145:163
Resnick, D., 143:38
Reuben, J. D., 139:17; 141:55
Reyman, T. A., 142:223
Rhinelander, F. W., 141:74
Rich, B. H., 139:58
Ries, M., 145:277
Riley, L. H., 145:85
Rinsky, L., 140:78; 145:213
Riska, E. B., 144:321
Ritter, M. A., 141:44; 143:115
Rittmann, W. W., 138:132

Robin, G., 139:156

- Robinson, S. C., 145:237
Roca, R. P., 144:238
Roffman, M., 144:230
Roper, B. A., 140:17
Rose, R. M., 145:277
Rosen, H., 138:154
Rosenberger, R., 142:168
Rosenthal, L., 143:46
Ross, P. M., 141:176
Roux, C., 144:4
Rüedi, T. P., 138:74, 105
Ryan, J. R., 144:178
Rydholm, U., 139:121

S

- Sabel, I., 143:133
Sahgal, S., 141:260
Saito, T., 138:246
Sajadi, K., 140:189
Sakou, T., 140:58
Salama, R., 140:159
Salciccioli, G. C., 144:178
Salvati, E. A., 141:143
Sarmiento, A., 144:166; 145:136, 208
Saunders, E. A., 141:213
Saunders, K. C., 143:194
Savino, A. W., 144:183
Schaller, J. G., 143:76
Schatzker, J., 138:77, 94; 141:256, 303; 145:146
Schibli, M., 138:132
Schiller, M., 139:92
Schlicke, L. H., 140:47; 143:271
Schneider, J. R., 140:184
Schneider, M., 142:223
Schoenecker, P. L., 139:128
Schroeder, K. E., 143:191
Schulak, D. J., 145:146
Schumacker, H. R., 143:260
Schurman, D. J., 141:251
Schweikert, C. H., 138:45
Schweppy, I., 142:244
Scott, W. N., 139:86; 140:175; 145:68

- Sculco, T. P., 140:175
Sedlin, E. D., 140:26
Segal, D., 140:21
Seligson, D., 148:243
Serrano, J. A., 141:295
Shahriaree, H., 140:189
Shea, W. D., 141:102
Sheehan, J. M., 145:101
Sheikh, Sh., 140:189
Sheridan, J., 139:128
Sherk, H. H., 141:196

- Sherrington, C. S., 145:4
 Shim, S. S., 140:255
 Shimamura, T., 139:232
 Shimazu, A., 138:263
 Shiraishi, S., 138:246
 Shoji, H., 140:266
 Shulman, I., 145:227
 Shybut, G. T., 138:12
 Silver, R. A., 140:111, 122
 Simpson, M., 140:216
 Singh, I., 144:305
 Singh, M., 144:135
 Sledge, C. B., 145:78
 Slocum, D. B., 143:90
 Smith, R. K., 144:280
 Smith, R. W., 142:2, 19
 Smythe, H., 143:84
 Snape, W. J., 141:196
 Snook, G. A., 144:27
 Solomon, G. C., 142:237
 Sotelo, A., 140:111, 122
 Spadaro, J. A., 143:266
 Speak, K. S., 143:245
 Specht, E. E., 144:280
 Speer, D. P., 139:267; 144:326
 Spiegel, P. G., 138:2, 26; 139:58
 Splain, S., 139:179
 Sprague, B. L., 139:68
 Spenger, T. R., 140:103
 Stamp, W. G., 139:276; 142:168
 States, J. D., 141:158
 Stefanelli, A., 139:49
 Steg, N. L., 144:255
 Steinberg, G. G., 145:199
 Steinberg, R., 139:156
 Steurer, P. A., 144:84
 Steves, C. R., 142:190
 Stewart, C. L., 141:74
 Stewart, R. D., 141:74
 Stinchfield, F. E., 139:133; 141:34
 Stokes, I. A. F., 142:64
 Stoll, D. A., 144:103
 Stoltenberg, J. J., 143:211
 Stott, J. R. RL., 142:64
 Stringer, E. A., 143:115
 Stuyck, J., 141:199, 203
 Sullivan, J. A., 144:233
 Sullivan, J. D., 140:80
 Sumner-Smith, G., 141:303
 Sutherland, D. H., 145:292
 Swanson, A. B., 142:30
 Swanson, G. D., 142:30
 Syftestad, G., 141:281
- T
 Talab, Y. A., 141:158
 Talmage, R. V., 138:254;
- 139:250
 Tanner, J., 145:213
 Tarr, R. R., 144:166; 145:208
 Taylor, F. B., Jr., 142:190
 Templeton, T. S., 141:213
 Thomas, R., 138:41
 Thomas, R. J., 138:30, 141; 145:47
 Thompson, G. H., 139:70; 144:249
 Thorpe, W., 143:133
 Toledo, L. C., 139:64
 Tomimura, K., 140:58
 Topilsky, M., 140:162
 Torisu, T., 143:107
 Toussaint, J. B., 144:74
 Townsend, P. F., 144:255
 Trafton, P. G., 141:308
 Treharne, R. W., 140:240; 145:300
 Tria, A. J., 145:68
 Tsai, T.-M., 139:182
 Tsang, K. Y., 144:305
 Tscherne, H., 138:41
 Tseng, C. H., 141:260
 Turner, R. H., 145:85
 Turner, T. M., 145:208
- U
 Uematsu, A., 139:169; 144:159, 220
 Upshaw, J. E., 145:85
 Urist, M. R., 141:275, 281
 Urovitz, E. P. M., 142:215
 Urs, N. D. K., 144:43
- V
 Vainio, K., 142:85
 Van Audekercke, R., 141:199, 203
 Vander Wiel, C. J., 138:254; 139:250
 Venugopal, V., 144:264
 Verkkala, K., 141:122
 Vertseeg, C. N., 139:58
 Volz, R. G., 140:153; 144:326
 Von der Mark, K., 139:185
- W
 Wadsworth, T. G., 144:151
 Wagner, F. W., Jr., 142:2, 110
 Waisman, M., 142:244
 Wallach, S., 144:284
 Walsh, W. M., 144:36
 Wang, G.-J., 139:276; 142:168
 Warren, R. F., 143:97
- Warren, S. L., 144:299
 Wasserkrug, H. L., 141:295
 Waterhouse, G. M., 140:216
 Waters, R. L., 145:189
 Waugh, T. R., 140:42
 Waylonis, G. W., 143:194
 Weber, B. G., 140:103
 Weber, H., 138:111
 Weber, P. C., 143:165
 Webster, D. A., 143:266
 Weiner, D. S., 144:336
 Weinert, C. R. Jr., 142:139
 Weingarden, S. I., 143:194
 Weissman, S. L., 140:159
 Weller, S., 138:45
 Westin, G. W., 139:70
 Wheeler, M. E., 139:68
 Wheeler, R. D., 141:251
 White, A. A., III, 140:47; 143:271
 Whitehill, R., 142:168
 Whiteside, L. A., 145:273
 Wickiewicz, T. L., 143:97
 Wickstrom, J. K., 142:185
 Wientroub, S., 140:159, 162
 Wiley, A. M., 139:150
 Wilkes, L. L., 138:217
 Willeneger, H., 138:111
 Williams, C., 141:303
 Wilson, P. D., Jr., 141:143
 Wilson, S. A., 144:43
 Wilson, T. C., 144:27
 Winquist, R. A., 138:56
 Winter, W. G., 138:311
 Wiss, D. A., 142:139
 Wood, M. B., 145:154
 Woods, G. W., 143:90
 Worrell, R. V., 144:91
 Wright, T. M., 141:55
 Wright, V., 143:8
 Wroblewski, B. M., 138:228; 141:71
 Wyss, A., 138:62
- Y
 Yablon, I. G., 140:21
 Yamamoto, S., 145:60
 Yamamuro, T., 145:264
 Yau, A. C. M. C., 139:102
 Yoshikawa, T. T., 144:238
 Yuan, H. A., 140:12
 Yukimura, T., 138:263
- Z
 Zimmerman, A. J., 141:188
 Zürcher, R., 141:122
 Zych, G. A., 144:166





